



August 2017

Dealer Service Instructions for:

Safety Recall T33 / NHTSA 17V-376

Steering Wheel Wiring

Models

2011-2012 (RT) Dodge Grand Caravan

NOTE: This recall applies only to the above vehicles built from August 23, 2010 through July 25, 2012 (MDH 082322 through 072515).

IMPORTANT: Some of the involved vehicles may be in dealer used vehicle inventory. Dealers should complete this recall service on these vehicles before retail delivery. Dealers should also perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

Subject

The steering wheel wire harness on about 210,000 of the above vehicles may be trapped between a tab on the steering wheel plastic back cover and the edge of the horn plate. The edge of the horn plate may rub through the wire insulation creating a short which could result in an inadvertent driver airbag deployment. This condition could increase the risk of a crash and/or injury to vehicle occupants.

Repair

Inspect the steering wheel wire harness and repair or replace if needed. Install protective sleeves to the steering wheel wire harness to prevent wire chaffing and remove the tab on the steering wheel plastic back cover.

Parts Information

Initial parts allocations will be sent directly to each dealer for the kit below.

<u>Part Number</u>	<u>Description</u>
CSSCT331AA	Package, Protective Sleeves

Each package contains the following components:

<u>Quantity</u>	<u>Description</u>
1	Protective Sleeve (60mm) (SCCM wires)
1	Protective Sleeve (80mm) (Horn wires)

Due to the small number of involved vehicles expected to require Steering Wheel Wire Harness replacement, no parts will be distributed initially. **Parts should be ordered only after inspection determines that Steering Wheel Wire Harness replacement is required.** *Very few vehicles are expected to require a Steering Wheel Wire Harness replacement.*

The Steering Wheel Wire Harnesses may be ordered only if a bare copper wire is present during inspection. A STAR Case must be submitted including a digital image (photo) then contact the STAR Center to obtain parts.

68160755AA	Wire Harness, Steering Wheel (Non-heated steering) (if required)
68196570AA	Wire Harness, Steering Wheel (Heated steering) (if required)
06505656AA	Bolt, Steering Wheel (if required) (MSQ 5)
04856500	Wire Tie, 5.375" (if required) (one per vehicle)

NOTE: Each wire tie kit contains 50 wire ties. One kit can repair 50 vehicles. Please order 1 kit.

Parts Return

No parts return required for this campaign.

Special Tools

The following special tools are required to perform this repair:

- NPN wiTECH micro pod II
- NPN Laptop Computer
- NPN wiTECH Software

Service Procedure**A. Inspect Steering Wheel Wiring**

WARNING: To avoid serious or fatal injury on vehicles equipped with airbags, disable the Supplemental Restraint System (SRS) before performing this service procedure.

Disconnect and isolate the battery negative (ground) cable, then wait two minutes for the system capacitor to discharge before performing this procedure. This is the only sure way to disable the SRS. Failure to take the proper precautions could result in accidental airbag deployment.

At no time should any source of electricity be permitted near the inflator on the back of a non-deployed airbag. When carrying a non-deployed airbag, the trim cover or airbag cushion side of the unit should be pointed away from the body to minimize injury in the event of an accidental deployment.

1. Disconnect and isolate the negative cable from the battery. Wait two minutes for the system capacitor to discharge before further service.
2. Open the two access hole covers on the back of the steering wheel cover (Figure 1).
3. Working through the access holes in each side of the steering wheel rear trim cover, remove the two screws that secure the floating horn switch and Driver Airbag (DAB) unit to the steering wheel armature.



Figure 1 - DAB Screw Locations

Service Procedure (Continued)

4. Pull the DAB and floating horn switch unit away from the steering wheel far enough to access the electrical connections at the back of the airbag housing and switch unit.
5. Disconnect the steering wheel wire harness connector from the floating horn switch connector on the back of the switch (Figure 2).

CAUTION: Do not pull on the clockspring pigtail wires or pry on the connector insulators to disengage them from the Driver Airbag (DAB) inflator initiator connector receptacles. Improper removal of these pigtail wires and their connector insulators can result in damage to the airbag circuits or the connector insulators.

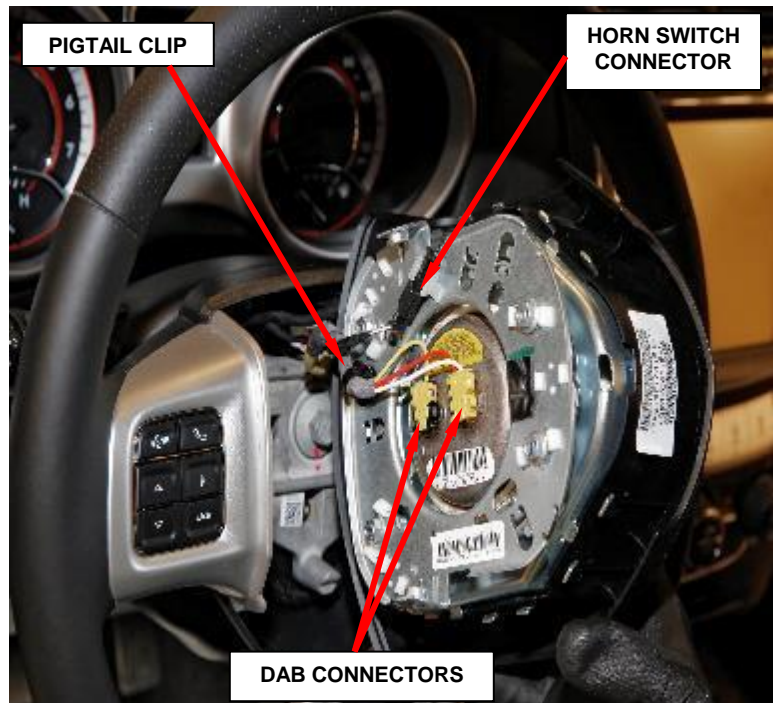


Figure 2 – DAB Electrical Connectors

6. The clockspring DAB pigtail wire connector insulators are secured by integral latches to the airbag inflator connector receptacles, which are located on the back of the DAB housing. Pinch both latches firmly, then pull the insulators straight out from the airbag inflator to disconnect them from the connector receptacles (Figure 2).
7. Release the clockspring DAB pigtail clip from the floating horn switch (Figure 2).
8. Remove and save the DAB from the steering wheel.

Service Procedure (Continued)

9. Disconnect the SCCM 6-way electrical connector (Figure 4).
10. Using a diagonal plier or equivalent, remove the free-standing portion of the plastic tab on the steering wheel plastic back cover as shown (Figure 3).

NOTE: The free-standing portion of the plastic tab is approximately 0.5 inch (13mm) tall. Remove as much of the plastic tab as possible without cutting into the steering wheel back cover.

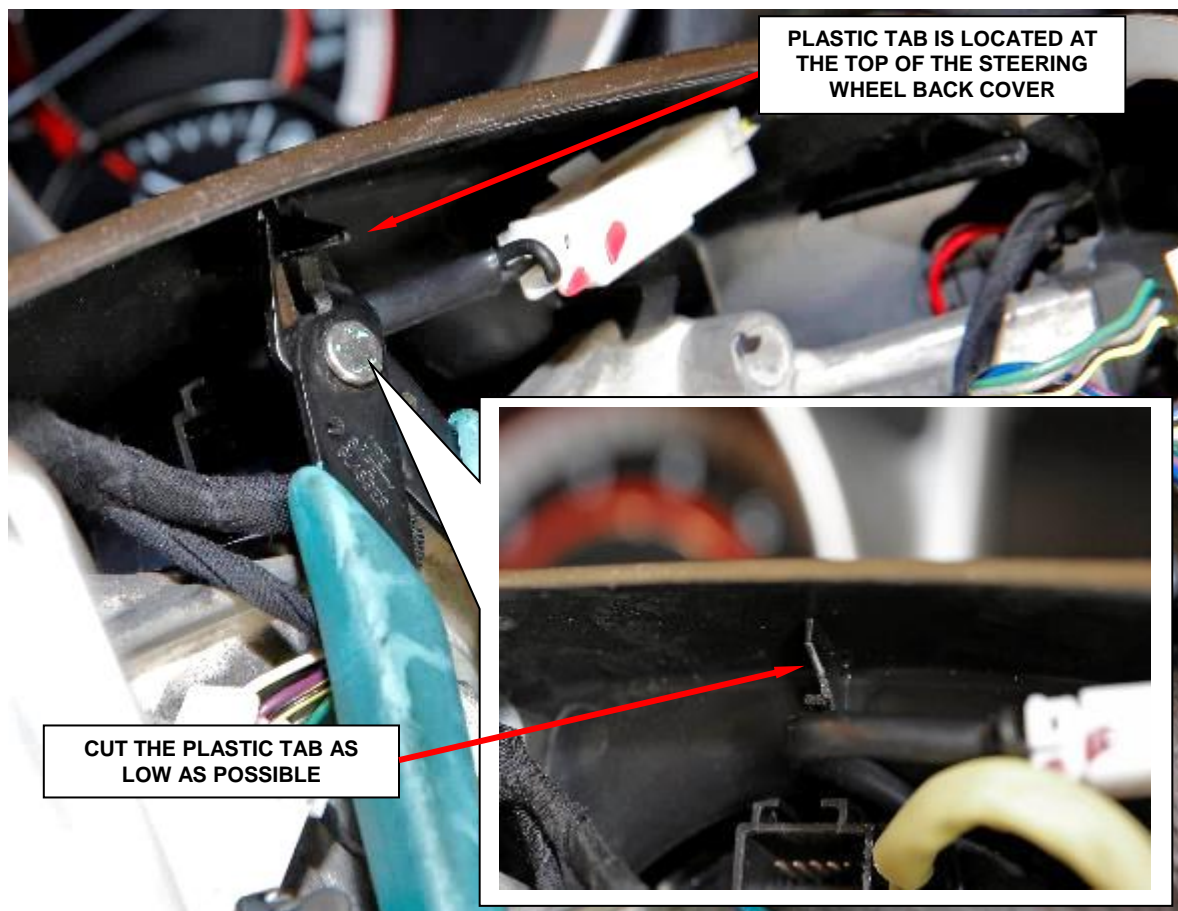


Figure 3 – Plastic Tab Removal

Service Procedure (Continued)

11. Inspect the steering wheel wire harness at the SCCM 6-way electrical connector and the horn connector pigtails for damage (Figures 4 and 5).

Note: Damage or chaffing to the tape wrap on the pigtails does not require a harness replacement. If tape rub through is present, pull back the tape and inspect for insulation rub-through (Figure 5).

- If bare copper wire is present on either pigtail submit a STAR Case including a digital image (photo) and contact STAR Center to obtain parts, then continue with Section **B. Replace Steering Wheel Wire Harness.**
- If no damage is present continue with **Step 12.**

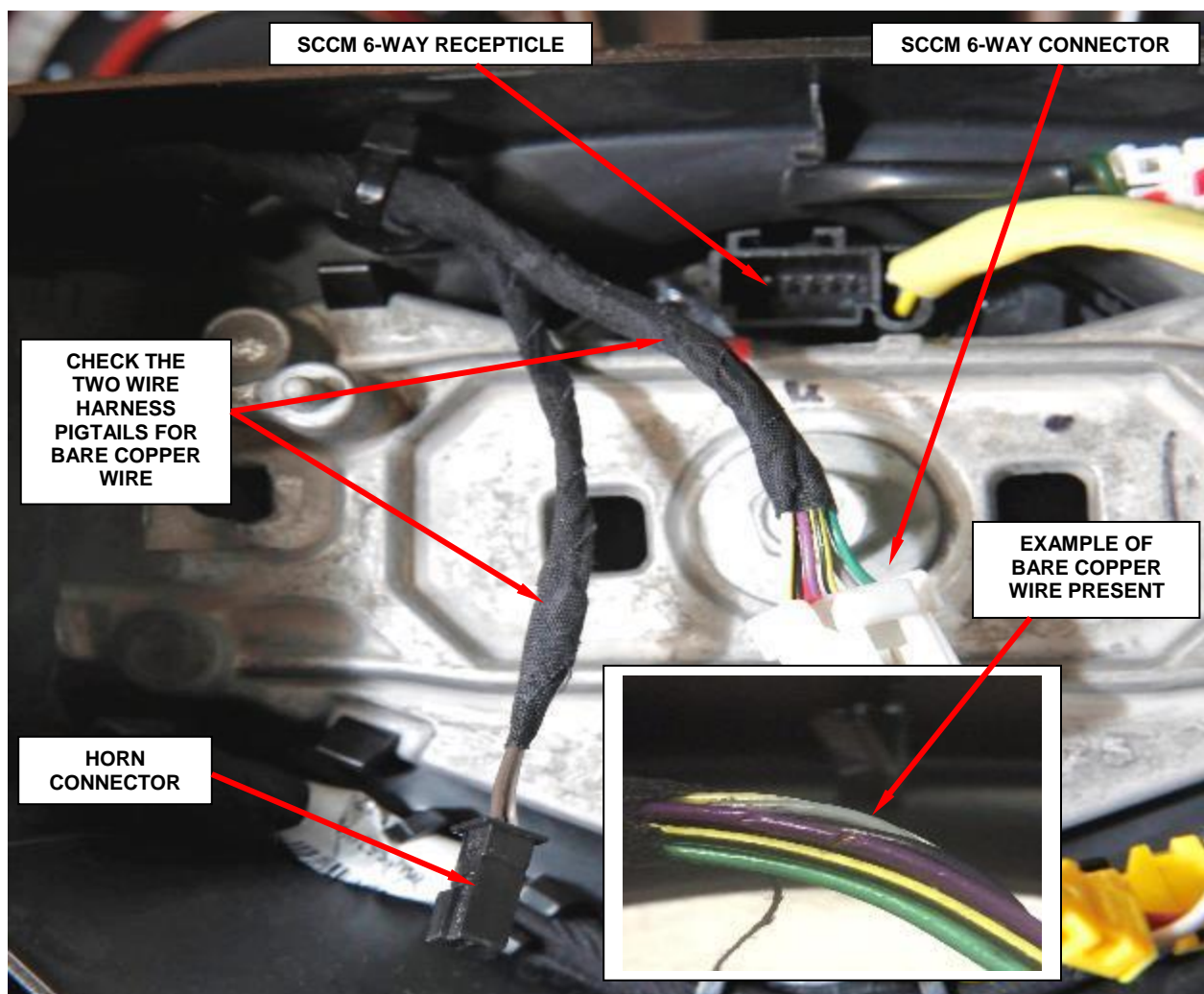


Figure 4 – Inspect for Wire Harness Damage

Service Procedure (Continued)

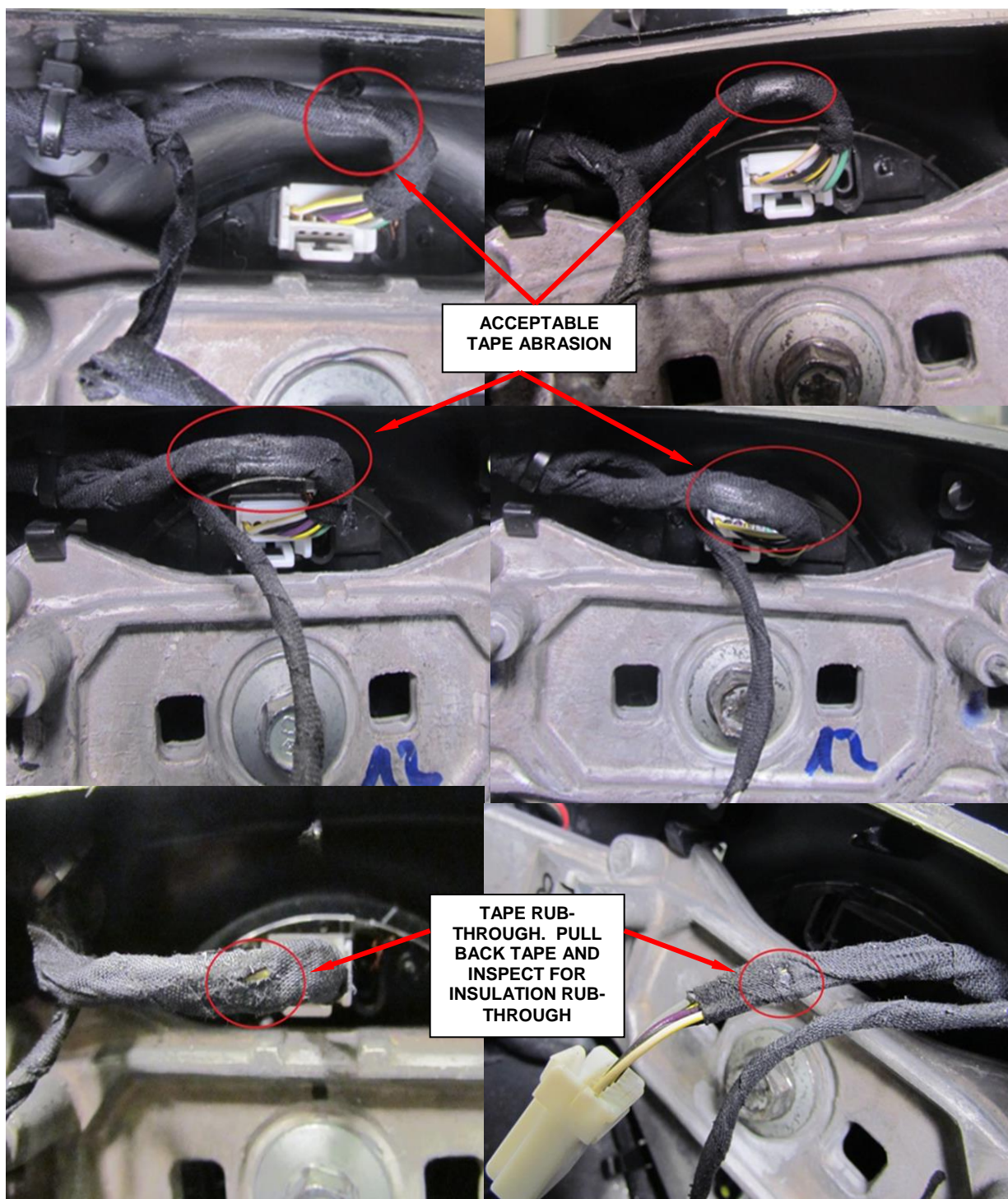


Figure 5 –Tape Inspection

Service Procedure (Continued)

12. Install the provided 60mm protective sleeve over the SCCM six-way electrical connector pigtail (Figure 6).
13. Install the provided 80mm protective sleeve over the horn connector pigtail (Figure 6).
14. Connect the SCCM 6-way electrical connector.

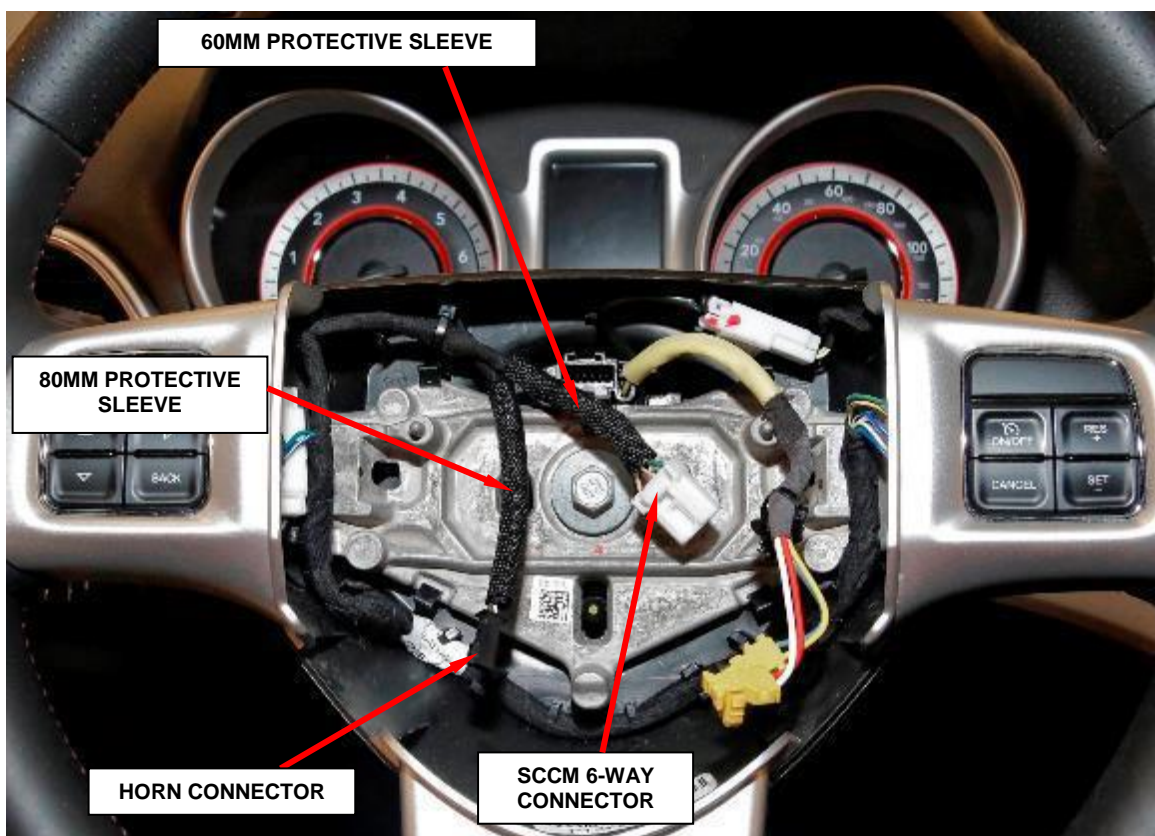


Figure 6 – Install Protective Sleeves

Service Procedure (Continued)

15. Position the DAB and floating horn switch unit close enough to the steering wheel to reconnect the electrical connections to the back of the airbag housing.
16. Connect the steering wheel wire harness connector to the floating horn switch connector on the back of the switch.
17. Connect the wire connectors to the airbag inflator connector receptacles by pressing straight in on the connector insulator. Be certain to engage each keyed and color-coded connector to the matching connector receptacle. You can be certain that each connector is fully engaged in its receptacle by listening carefully for a distinct, audible click as the connector latches snap into place.
18. Secure the clockspring DAB pigtail clip to the floating horn switch.
19. Carefully position the DAB and floating horn switch unit into the steering wheel hub. Be certain that none of the steering wheel wiring is pinched between the airbag housing or the horn switch and the steering wheel armature.
20. Working through the access holes in each side of the steering wheel rear trim cover, install and tighten the two screws that secure the floating horn switch and DAB unit to the steering wheel armature. Tighten the screws to 13 N·m (10 ft. lbs.).
21. **Do not connect the negative cable to the battery at this time.** The Supplemental Restraint System (SRS) Verification Test procedure should be performed following service of any SRS component. **Continue with Section C. Supplemental Restraint System (SRS) Verification Test.**

Service Procedure (Continued)**B. Replace Steering Wheel Wire Harness**

1. Disconnect the heated steering wheel electrical connector, if equipped. (Figure 7).
2. Holding the steering wheel firmly in place, remove and **discard** the steering wheel retaining bolt from the steering column shaft (Figure 7).

CAUTION: Do not bump or hammer on the steering wheel or steering column shaft when removing the steering wheel.

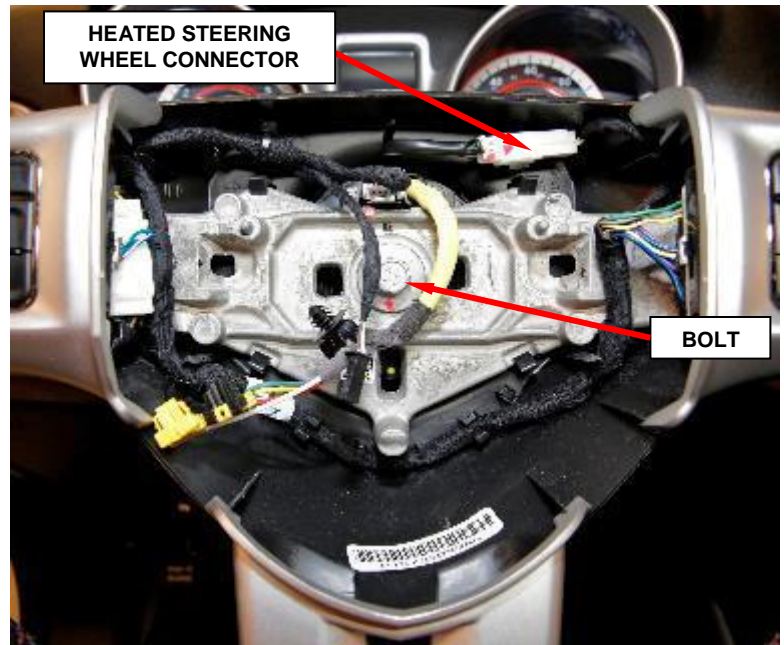


Figure 7 - Steering Wheel Bolt

3. Remove the steering wheel from the steering column shaft splines.
4. Remove and save the four steering wheel back cover screws (Figure 8).

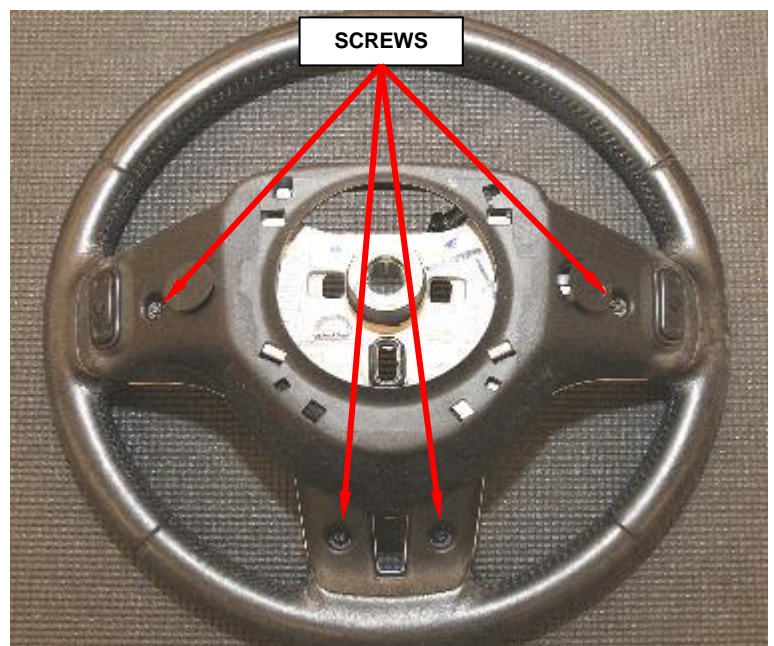


Figure 8 – Steering Wheel Back Cover Screws

Service Procedure (Continued)

5. Remove and save the lower steering wheel trim bezel (Figure 9).
6. Release the right and left side switch bezels and disconnect the electrical connectors. Remove and save the right and left side switch bezels (Figure 9).
7. Release the heated steering wheel electrical connector from the steering wheel back cover, if equipped (Figure 9).

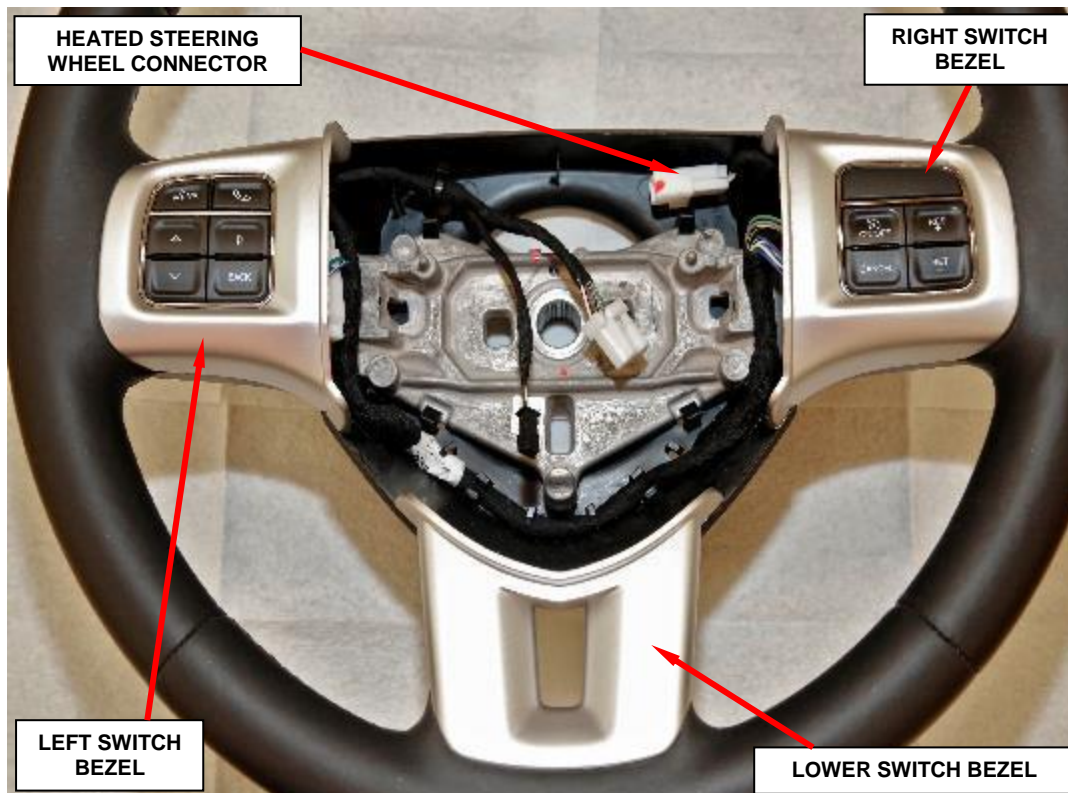
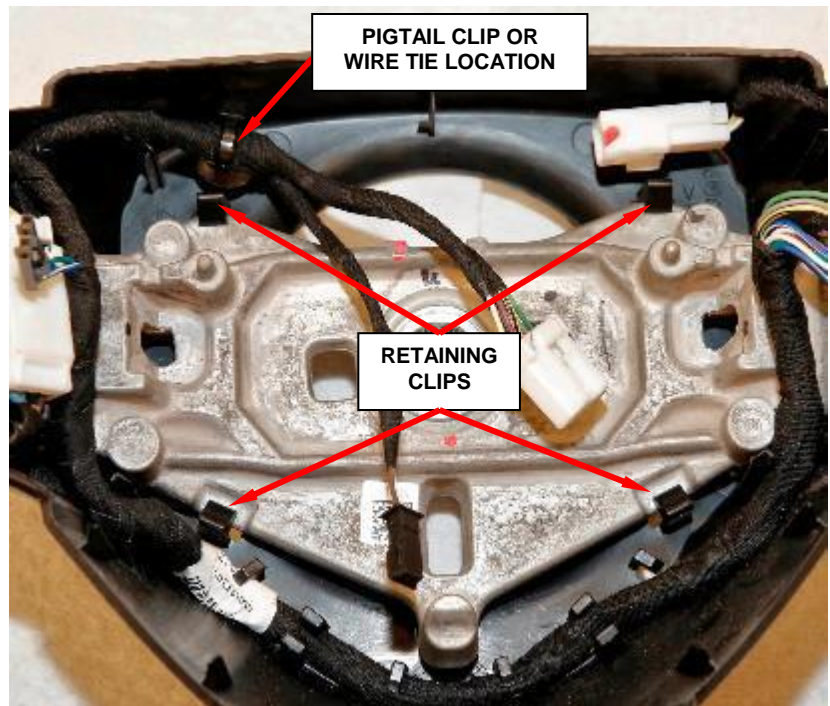
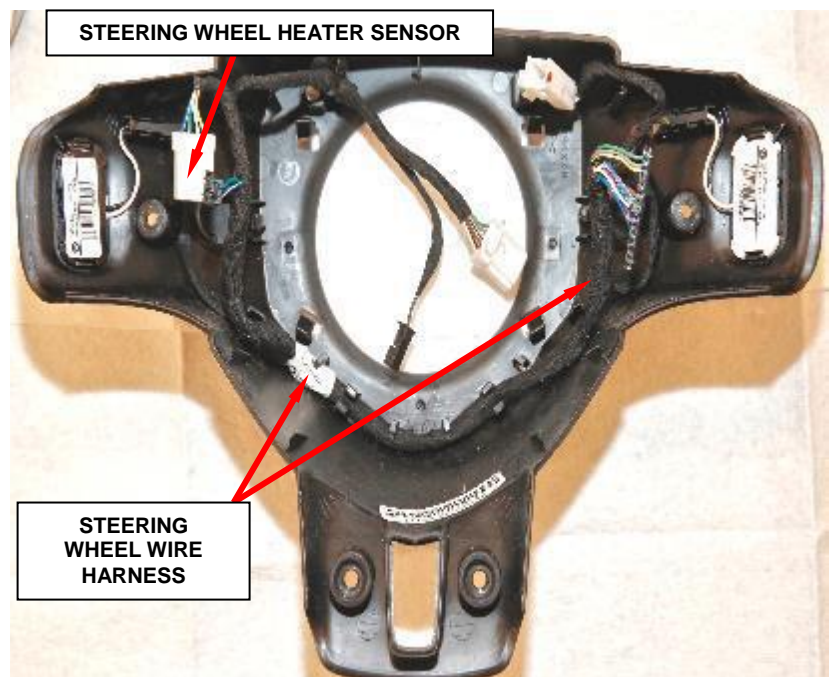


Figure 9 - Remove Trim/Switch Bezels

Service Procedure (Continued)

8. Release the wire harness pigtail clip from the steering wheel back cover. If equipped with a wire tie remove and discard the wire tie (Figure 10).
 9. Release the four steering wheel back cover retaining clips (Figure 10).
 10. Disconnect the steering wheel heater sensor, if equipped (Figure 11).
 11. Remove and save the steering wheel rear cover.
- NOTE: Take note of the wire harness routing at this point.**
12. Remove and **discard** the steering wheel wire harness (Figure 11).

**Figure 10 – Steering Wheel Cover Retaining Clips****Figure 11 – Steering Wheel Wire Harness**

Service Procedure (Continued)

13. Install the **NEW** steering wheel wire harness on to the steering wheel back cover as shown (Figure 12).
14. Connect the two steering wheel control switch connectors (Figure 12).

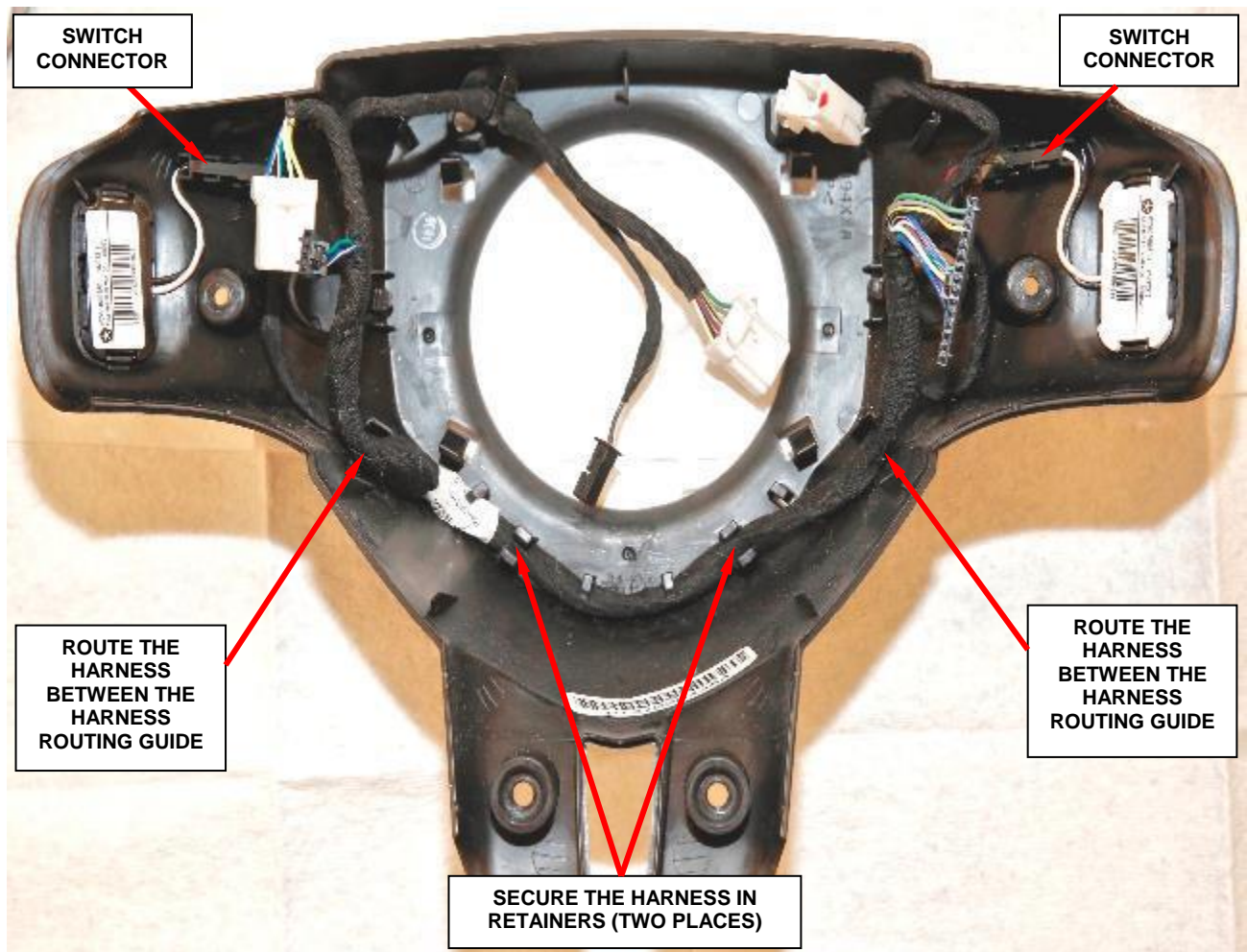


Figure 12 – Steering Wheel Wire Harness Routing

Service Procedure (Continued)

15. Install the provided 60mm protective sleeve over the SCCM six-way electrical connector pigtail (Figure 13).
16. Install the provided 80mm protective sleeve over the horn connector pigtail (Figure 13).

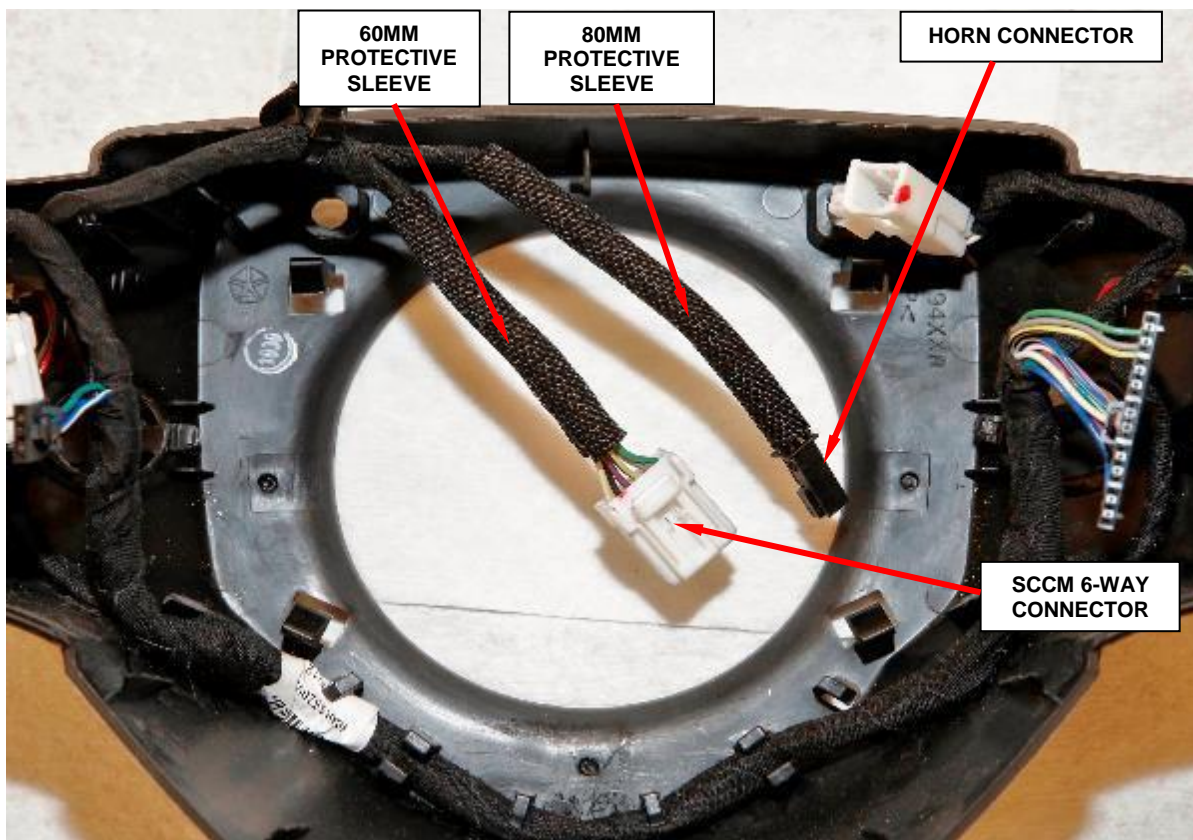
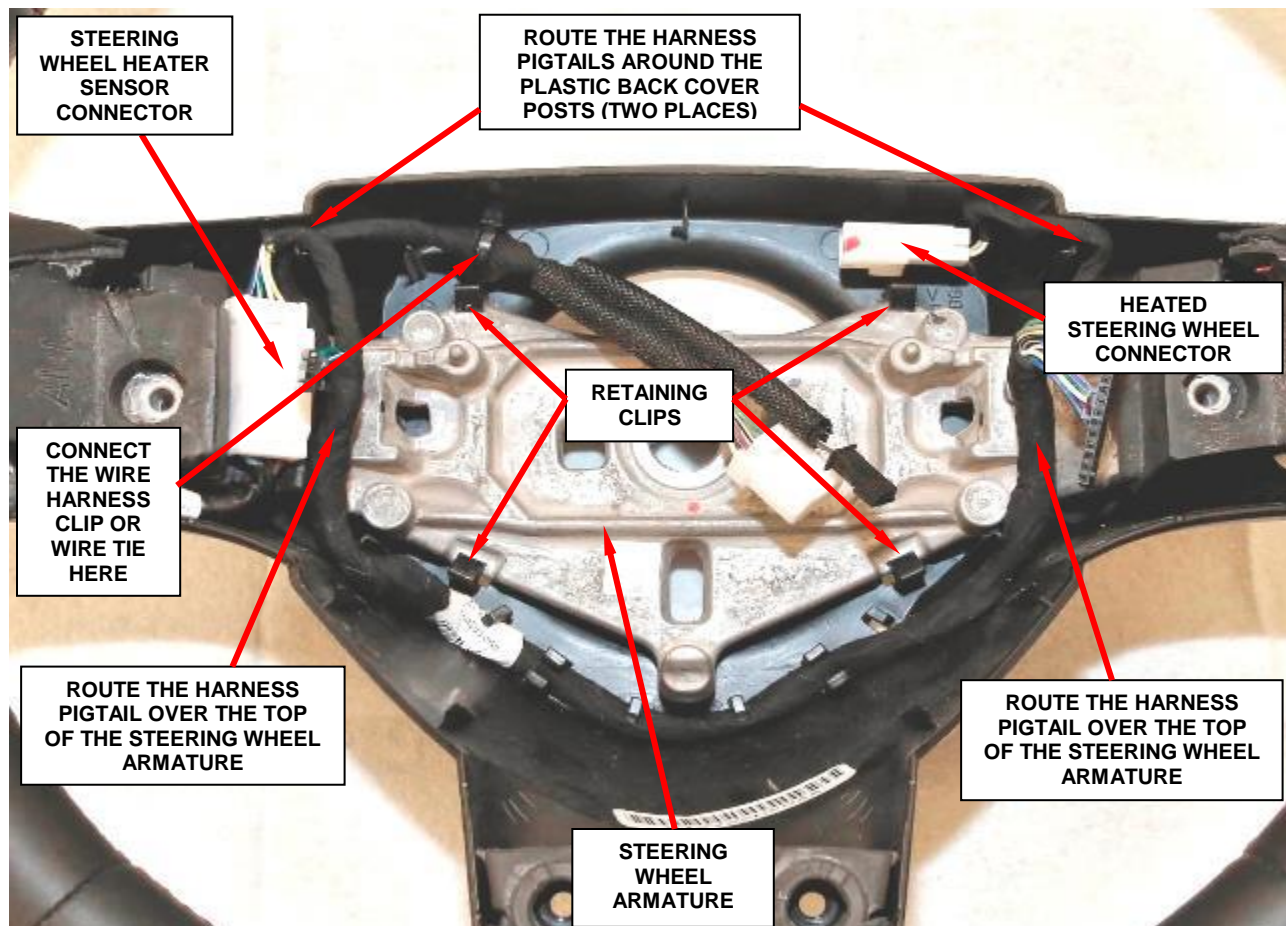


Figure 13 - Install Protective Sleeves

Service Procedure (Continued)

17. Position the steering wheel to the steering wheel back cover (Figure 14).
18. Route the two wire harness pigtails over the top of the steering wheel armature as shown (Figure 14).
19. Snap the four steering wheel back cover retaining clips to the steering wheel armature. Assure all four clips are securely latched to the armature (Figure 14).
20. Clip the heated steering wheel electrical connector to the steering wheel back cover and connect the steering wheel heater sensor connector, if equipped (Figure 14).
21. Connect the wire harness pigtail clip to the steering wheel back cover. If the vehicle was equipped with a wire tie, remove the tie strap clip from the new wire harness and secure the harness to the back cover with a **NEW** supplied wire tie (Figure 14).

**Figure 14 – Wire Harness Routing**

Service Procedure (Continued)

22. Install the lower steering wheel trim bezel.
23. Connect the right and left side switch bezel electrical connectors and install the right and left side switch bezels to the steering wheel back cover.
24. Install the four steering wheel back cover screws and tighten the screws securely.
25. Line up the steering wheel with the steering shaft and install the steering wheel.
26. Install a **NEW** steering wheel retaining bolt and tighten to 50 N·m (37 ft. lbs.).
27. Connect the heated steering wheel electrical connector, if equipped.
28. Connect the SCCM 6-way electrical connector.

NOTE: Ensure that the SCCM connector wire loop is tucked or pushed back toward the back cover to avoid any contact with the edge of the horn plate when DAB is installed.

29. Position the DAB and floating horn switch unit close enough to the steering wheel to reconnect the electrical connections to the back of the airbag housing.
30. Connect the steering wheel wire harness connector to the floating horn switch connector on the back of the switch.
31. Connect the wire connectors to the airbag inflator connector receptacles by pressing straight in on the connector insulator. Be certain to engage each keyed and color-coded connector to the matching connector receptacle. You can be certain that each connector is fully engaged in its receptacle by listening carefully for a distinct, audible click as the connector latches snap into place.

Service Procedure (Continued)

32. Secure the clockspring DAB pigtail clip to the floating horn switch.
33. Carefully position the DAB and floating horn switch unit into the steering wheel hub. Be certain that none of the steering wheel wiring is pinched between the airbag housing or the horn switch and the steering wheel armature.
34. Working through the access holes in each side of the steering wheel rear trim cover, install and tighten the two screws that secure the floating horn switch and DAB unit to the steering wheel armature. Tighten the screws to 13 N·m (10 ft. lbs.).
35. Do not connect the negative cable to the battery at this time. The Supplemental Restraint System (SRS) Verification Test procedure should be performed following service of any SRS component. **Continue with Section C. Supplemental Restraint System (SRS) Verification Test.**

Service Procedure (Continued)**C. Supplemental Restraint System (SRS) Verification Test**

NOTE: During the following test, the negative battery cable remains disconnected and isolated during steps 1, 2 and 3 of the Supplemental Restraint System (SRS) Verification Test.

NOTE: The wiTECH scan tool must be used to perform this recall. The wiTECH software is required to be at the latest release level before performing this procedure.

1. Connect the wiTECH micro pod II to the vehicle data link connector located under the steering column.
2. For vehicles equipped with a keyed ignition switch, turn the ignition switch to the “ON” position and exit the vehicle then **continue with Step 4**.
3. For vehicles equipped with keyless ignition node remove the airbag module fuses in the TIPM located under the hood. Check to be certain that nobody is in the vehicle then connect the battery negative cable(s) and turn the ignition switch to the “ON” position and **continue with Step 5**.
4. Check to be certain that nobody is in the vehicle then connect the battery negative cable(s).
5. Install the airbag module fuses, if applicable.
6. Open the wiTECH 2 website.
7. Enter your “**User id**”, “**Password**” and “**Dealer Code**” then select “**Sign in**”.
8. Starting at the “**Vehicle Selection**” screen, select the appropriate vehicle and Device Name.
9. From the “**Action Items**” screen select the “**All DTCs**” tab.

Service Procedure (Continued)

10. Clear all DTCs in all modules.

NOTE: Any active Diagnostic Trouble Codes (DTCs) may require an additional key cycle from “ON” to “OFF” to change DTC status from “active” to “stored”.

11. Turn the ignition switch to the “OFF” position for about 15 seconds, and then back to the “ON” position. Observe the airbag indicator in the instrument cluster.
 - The airbag indicator in the instrument cluster should illuminate for six to eight seconds, and then go out. This indicates that the SRS is functioning normally and that the repairs are complete. Turn the ignition to the “OFF” position.
 - If the airbag indicator fails to light or the light and stays ON, there is still an active SRS fault or malfunction. Refer to the appropriate diagnostic information to diagnose the problem.
12. From the “Action Items” screen select the “All DTCs” tab.
13. Check for active DTC’s.
 - If there are no active DTCs present, continue with **Step 14**.
 - If there are active DTCs present, refer to all current, normal diagnostics published in DealerCONNECT/TechCONNECT and repair as necessary following normal warranty repair guidelines then continue with **Step 14**.
14. Close the hood, remove the wiTECH micro pod II.
15. Return the vehicle to the customer.

Completion Reporting and Reimbursement

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims paid will be used by FCA to record recall service completions and provide dealer payments.

Use one of the following labor operation numbers and time allowances:

	<u>Labor Operation Number</u>	<u>Time Allowance</u>
Inspect and Install Protective Sleeves	08-T3-31-82	0.4 hours
Inspect and Replace Steering Wheel Wire Harness and Install Protective Sleeves	08-T3-31-83	0.7 hours

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

Dealer Notification

To view this notification on DealerCONNECT, select “Global Recall System” on the Service tab, then click on the description of this notification.

Owner Notification and Service Scheduling

All involved vehicle owners known to FCA are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

Vehicle Lists, Global Recall System, VIP and Dealer Follow Up

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an updated VIN list of their incomplete vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the “**Service**” tab and then click on “**Global Recall System.**” Your dealer's VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

Dealers must perform this repair on all unsold vehicles before retail delivery. Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.

Additional Information

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

Customer Services / Field Operations
FCA US LLC

This notice applies to your vehicle,

[Model Year and Model]

VIN XXXXXXXXXX

T33/NHTSA 17V-376

LOGO

VEHICLE PICTURE

YOUR SCHEDULING OPTIONS

- 1. RECOMMENDED OPTION**
Call your authorized Chrysler /
Dodge / Jeep® / RAM Dealership
- 2. Call the FCA Recall Assistance
Center at 1-800-853-1403. An
agent can confirm part
availability and help schedule an
appointment**
- 3. Visit our Recall Website,
recalls.mopar.com or scan below.**

QR Code

You can find your nearest dealer and review all your scheduling options from this website. You will be asked to provide your Vehicle Identification Number (VIN) to protect and verify your identity. The last eight characters of your VIN are provided above.

DEALERSHIP INSTRUCTIONS

Please reference Safety Recall T33.

IMPORTANT SAFETY RECALL

Steering Wheel Wiring

Dear [Name],

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act.

FCA has decided that a defect, which relates to motor vehicle safety, exists in certain [2011 and 2012 model year (RT) Dodge Grand Caravan] vehicles.

It is extremely important to take steps now to repair your vehicle to ensure the safety of you and your passengers.

WHY DOES MY VEHICLE NEED REPAIRS?

The steering wheel wire harness on your vehicle ^[1] may be trapped between a tab on the steering wheel plastic back cover and the edge of the horn plate. The wire harness may rub through the wire insulation creating a short which could result in an inadvertent driver airbag deployment. **This condition could increase the risk of a crash and/or injury to vehicle occupants.**

HOW DO I RESOLVE THIS IMPORTANT SAFETY ISSUE?

FCA will repair your vehicle ^[2] free of charge (parts and labor). To do this, your dealer will inspect the steering wheel wire harness and repair or replace if needed. The steering wheel wire harness will have protective sleeves installed to prevent wire chaffing and the tab on the steering wheel plastic back cover will be removed. In addition, your dealer will require your vehicle for proper check-in, preparation, and check-out during your visit. Your time is important to us; please be aware that these steps may require more time. The estimated repair time is one hour. We recommend that you schedule a service appointment to minimize your inconvenience. Please bring this letter with you to your dealership.

**TO SCHEDULE YOUR FREE REPAIR CALL 1-800-853-1403
OR YOUR CHRYSLER, DODGE, JEEP OR RAM DEALER TODAY**

WHAT IF I ALREADY PAID TO HAVE THIS REPAIR COMPLETED?

If you have already experienced this specific condition and have paid to have it repaired, you may visit www.fcarecallreimbursement.com to submit your reimbursement request online. ^[3] Once we receive and verify the required documents, reimbursement will be sent to you within 60 days. If you have had previous repairs performed and/or already received reimbursement, you may still need to have the recall repair performed.

We apologize for any inconvenience, but are sincerely concerned about your safety. Thank you for your attention to this important matter.

Customer Assistance/Field Operations
Fiat Chrysler Automobiles US LLC



Mr. Mrs. Customer
1234 Main Street
Hometown, MI 48371

[1] If you no longer own this vehicle, please help us update our records. Call the FCA Recall Assistance Center at 1-800-853-1403 to update your information.

[2] If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave., S.E., Washington, DC 20590, or you can call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY 1-800-424-9153), or go to safercar.gov.

[3] You can also mail in your original receipts and proof of payment to the following address for reimbursement consideration: FCA Customer Assistance, P.O. Box 21-8004, Auburn Hills, MI 48321-8007, Attention: Recall Reimbursement.

Note to lessors receiving this recall notice: Federal regulation requires that you forward this recall notice to the lessee within 10 days.